

## WHAT IS CLAIMED IS:

1. An acceleration sensor comprising:

a substrate having a major surface;

an acceleration sensor element and a frame  
5 portion surrounding the element, the element and the  
portion being located on the major surface of the  
substrate;

an intermediate layer formed on the frame  
portion;

10 a cap portion bonded to the intermediate layer,  
thereby sealing-off the acceleration sensor element; and

grooves in the form of a frame provided in the  
frame portion and the intermediate layer, respectively, and  
located at positions generally identical to each other with  
15 regard to the major surface direction of the substrate.

2. The acceleration sensor in accordance with claim  
1, wherein the grooves in the frame portion and the  
intermediate layer are through holes.

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3. The acceleration sensor in accordance with claim  
1, wherein the cap portion is formed with a groove in the  
form of a frame at an junction region between the cap  
portion and the intermediate layer, the groove of the cap  
25 portion being located at a position generally identical to

those of the grooves of the frame portion and the intermediate layer with regard to the major surface direction.

5 4. An acceleration sensor comprising:  
 a substrate having a major surface;  
 an acceleration sensor element and a frame  
 portion surrounding the element, the element and the  
 portion being located on the major surface of the  
 10 substrate;

an intermediate layer formed on the frame  
 portion; and

a cap portion bonded to the intermediate layer,  
 thereby sealing-off the acceleration sensor element;

15 wherein the frame portion has a part extended  
 from an junction region between the intermediate layer and  
 the cap portion toward the acceleration sensor element, the  
 part being provided with a groove in the form of a frame  
 surrounding the acceleration sensor element.